

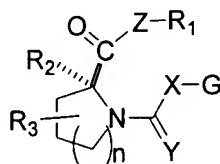


IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Currently Amended) A compound or a pharmaceutically acceptable salt or a stereoisomer of formula I



I

wherein

R₁ is selected from the group consisting of hydrogen, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, arylalkyl or substituted arylalkyl, and CH₂OR₄;

R₂ is selected from the group consisting of hydrogen, alkyl or substituted alkyl, alkenyl or substituted alkenyl, arylalkyl or substituted arylalkyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, heteroaryl or substituted heteroaryl, and CH₂OR₄;

R₃ is selected from the group consisting of hydrogen, alkyl or substituted alkyl, CH₂OR₄, OR₂, SR₂, halo, NHR₂, NHCOR₄, NHCO₂R₄, NHCONR₄R₄', and NHSO₂R₄;

R₄ and R₄' for each occurrence are each independently selected from the group consisting of hydrogen, alkyl or substituted alkyl, alkenyl or substituted alkenyl, alkynyl or substituted alkynyl, cycloalkyl or substituted cycloalkyl, arylalkyl or substituted arylalkyl, aryl or substituted aryl, heterocyclo or substituted heterocyclo, and heteroaryl or substituted heteroaryl;

G is a mono- or polycyclic ring system selected from the group consisting of aryl, heterocyclo, and heteroaryl, wherein said ring system may optionally substituted with one or more substituents selected from the group consisting of hydrogen, halo, CN, CF₃, OR₄, CO₂R₄, NR₄R₄', CONR₄R₄', CH₂OR₄, SR₄, SOR₄, SO₂R₄, NO₂, alkyl or substituted alkyl, alkenyl or substituted

alkenyl, alkynyl or substituted alkynyl, cycloalkyl or substituted cycloalkyl, arylalkyl or substituted arylalkyl, aryl or substituted aryl, and heteroaryl or substituted heteroaryl;

X is a linking group selected from the group consisting of NR_4 and CHR_4 ;

Y is selected from the group consisting of O, NR_4 , NOR_4 , S_2 and CH ;

Z is -O- or NR_4 ; and

n is an integer of 1 or 2;

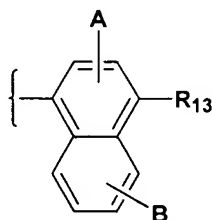
~~including all prodrug esters, pharmaceutically acceptable salts and stereoisomers thereof,~~

with the following provisos:

- (a) when Y is NOR_4 , R_4 is not hydrogen;
- (b) excluding compounds where the following occur ~~simultaneously~~ simultaneously:
 - R_1 is methyl;
 - X is NH ;
 - Y is O or S; and
 - Z is O;
- (c) excluding compounds where the following occur ~~simultaneously~~ simultaneously:
 - R_1 is methyl;
 - X is NH ;
 - Z is O;
 - Y is NR_4 ;

R_4 is selected from the group consisting of hydrogen, alkyl or substituted alkyl, alkenyl or substituted alkenyl, cycloalkyl or substituted cycloalkyl, arylalkyl or substituted arylalkyl, aryl or substituted aryl, and heteroaryl or substituted heteroaryl; and

G has the following structure:



wherein

R₁₃ is selected from the group consisting of hydrogen, cyano (-CN), nitro (-NO₂), halo, heterocyclo, OR₁₄, CO₂R₁₅, CONHR₁₅, COR₁₅, S(O)_pR₁₅, SO₂NR₁₅R₁₅', NHCOR₁₅, and NHSO₂R₁₅;

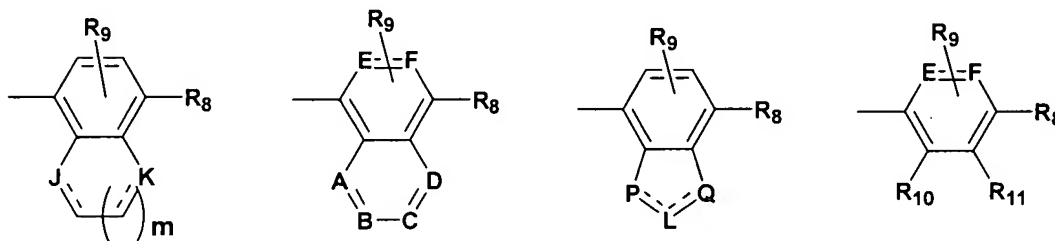
R₁₄ in each functional group is independently selected from the group consisting of hydrogen, alkyl or substituted alkyl, CHF₂, CF₃, and COR₁₅;

R₁₅ and R₁₅' in each functional group are each independently selected from the group consisting of hydrogen, alkyl or substituted alkyl, alkenyl or substituted alkenyl, alkynyl or substituted alkynyl, cycloalkyl or substituted cycloalkyl, heterocycloalkyl or substituted heterocycloalkyl, arylalkyl or substituted arylalkyl, aryl or substituted aryl, heteroaryl or substituted heteroaryl, and -CN;

A and B are each independently selected from the group consisting of hydrogen, halo, cyano(-CN), nitro(-NO₂), alkyl or substituted alkyl, and OR₁₄; and

p is an integer from 0 to 2.

2. (Currently Amended) The compound as defined in claim 1 wherein G is selected from:



wherein

R₈, R₉, R₁₀, and R₁₁ are each independently selected from the group consisting of hydrogen (H), NO₂, CN, CF₃, OR₄, CO₂R₄, NR₄R₄', CONR₄R₄', CH₂OR₄, alkyl or substituted alkyl, alkenyl or substituted alkenyl, alkynyl or substituted alkynyl, cycloalkyl or substituted cycloalkyl, arylalkyl or substituted arylalkyl, aryl or substituted aryl, and heteroaryl or substituted heteroaryl;

A to F is each independently selected from N or CR₁;

J, K, L, P, and Q are each independently selected from NR₁₂, O, S, SO, SO₂, or CR₁₂R₁₂';

R₁₂ and R₁₂' in each functional group are each independently selected from a bond or R₁; and

m is an integer of 0 or 1.

3. (Original) The compound as defined in claim 2 wherein R_8 is CN.
4. (Original) The compound as defined in claim 1 wherein
 R_1 is hydrogen or alkyl;
 R_2 is hydrogen or alkyl;
 R_3 is hydroxyl;
 X is NR_4 ;
 Y is O;
 Z is O; and
 n is 1
5. (Original) A pharmaceutical composition comprising the compound as defined in claim 1 and a pharmaceutically acceptable carrier therefore.
6. (Original) The pharmaceutical composition as defined in claim 5 further comprising a growth promoting agent.
7. (Original) A pharmaceutical composition comprising a compound as defined in claim 1 and at least one additional therapeutic agent selected from the group consisting of parathyroid hormone, bisphosphonates, estrogen, testosterone, progesterone, selective estrogen receptor modulators, growth hormone secretagogues, growth hormone, progesterone receptor modulators, anti-diabetic agents, anti-hypertensive agents, anti-inflammatory agents, anti-osteoporosis agents, anti-obesity agents, cardiac glycosides, cholesterol lowering agents, anti-depressants, anti-anxiety agents, anabolic agents, and thyroid mimetics.
8. (Currently Amended) A method for treating or delaying the progression or onset of muscular atrophy, ~~lipodystrophy, long-term critical illness,~~ sarcopenia, frailty or age-related functional decline, reduced muscle strength and function, reduced bone density or growth, ~~the catabolic side effects of glucocorticoids, chronic fatigue syndrome,~~ bone fracture repair, acute fatigue syndrome and muscle loss following elective surgery, cachexia, ~~chronic catabolic state,~~ eating disorders, side effects of chemotherapy, wasting, ~~depression, nervousness, irritability, stress,~~

growth retardation, ~~reduced cognitive function,~~ male contraception, hypogonadism, ~~Syndrome X,~~
~~diabetic complications, or obesity,~~ which comprises administering to a mammalian species in need
of treatment a therapeutically effective amount of a compound as defined in claim 1.

9. (Currently Amended) A method according to claim 8 further comprising
administering, concurrently or sequentially, a therapeutically effective amount of at least one
additional therapeutic agent selected from the group consisting of other compounds of formula I,
parathyroid hormone, bisphosphonates, estrogen, testosterone, progesterone, selective estrogen
receptor modulators, growth hormone secretagogues, growth hormone, progesterone receptor
modulators, anti-diabetic agents, anti-hypertensive agents, anti-inflammatory agents, anti-
osteoporosis agents, anti-obesity agents, cardiac glycosides, cholesterol lowering agents, anti-
depressants, anti-anxiety agents, anabolic agents, and thyroid mimetics.